

INEOS ABS

INEOS ABS (USA) Corporation

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January 23, 2015

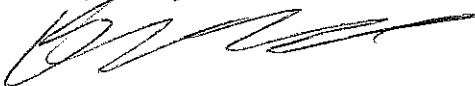
Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: Consent Decree Civil Action No. 1:09-CV-545
Effective Date February 4, 2010

Dear Sirs:

Please find attached the Semiannual Report for the second Half 2014. Please contact me at (513) 467-2184 or bradley.fattlar@ineos.com if you have any questions concerning the submitted information.

Respectfully Submitted,



Bradley Fattlar
Air Quality Engineer
INEOS ABS (USA) Corporation

cc: M. Palermo, USEPA Region 5
B. Weinburg, OEPA
G. Bachmann, Ohio AG
B. Pray (M. Kramer), SWOAQA

INEOS ABS (USA) CORPORATION'S ADDYSTON, OH PLANT

CONSENT DECREE SEMIANNUAL REPORT

Consent Decree Civil Action No. 1:09-CV-545

Effective Date February 4, 2010

Reporting Period: 07/01/14 – 12/31/14

I. INTRODUCTION

The following report contains the required information about INEOS ABS' compliance activities associated with the requirements in Paragraph 50 a. and 50 b. in the Consent Decree.

II. COMPLIANCE REQUIREMENTS

Per Section VI (Compliance Requirements) of the Consent Decree, INEOS ABS met the following compliance requirements:

A. FLARE COMPLIANCE REQUIREMENTS

1. Steam-to-Vent Gas Ratio < 3.6 to 1 as a 1-hour Block Average (Paragraph 18 a.)
No deviations in the first half of 2014.
2. Net Heating Value of Vent Gas > 385 BTU/scf as a 1-hour Block Average (Paragraph 18 b.)
This is no longer a requirement.
3. NHVFG > 200 BTU/scf as a 1-hour Block Average (Paragraph 19)
One deviation in the second half of 2014.
4. Flare Monitoring Requirements (Paragraph 20 & 23)
Required data was measured, calculated, and recorded at all times that the Process P001 Flare was in operations and reports were submitted quarterly as stated in the Quarterly Reports submitted on April 14, 2014 and July 11, 2014.
5. Flare Monitoring Instruments Standard Operating Procedure (SOP) (Paragraphs 21 & 22)
The SOP was submitted on March 5, 2010. Conditional approval from U.S. EPA was received on June 7, 2010. INEOS ABS submitted a Notice of Dispute on June 24, 2010, which has yet to be resolved.
6. Passive FTIR (Paragraph 24)
The Passive FTIR Work Plan was submitted August 17, 2009 and a revised Passive FTIR Work Plan was submitted September 28, 2009. The U.S. EPA approved the Passive FTIR Work Plan on October 28, 2009. The testing was performed November 3 through November 5, 2009. The Passive FTIR Test Report was submitted on July 6, 2010, and a Supplemental Report was submitted on August 6, 2010.
7. P001 Process Evaluations (Paragraph 25)
Ambient air monitoring began at a new monitoring station (Kibby Lane Monitoring Station) in August 2012. Detections of 1,3-butadiene at the

Monitoring frequencies were increased on January 1, 2010 (prior to the Effective Date of the Consent Decree). The deviations are explained in the summary of non-compliance issues.

3. Part C: Monitoring Methods and Equipment

Method 21 is being used to perform monitoring of all Covered Equipment using a Toxic Vapor Analyzer 1000B Flame Ionization Detector attached to a datalogger which directly electronically records the required data. The monitoring data is transferred to an electronic database daily as of January 1, 2010. As of January 1, 2010 (prior to the Effective Date of the Consent Decree), calibration of the LDAR monitoring equipment is being performed per Method 21 and calibration drift assessment are performed prior to and completion of each monitoring shift.

4. Part D: LDAR Action Levels

Lower leak repair action levels were implemented on January 1, 2010 (prior to the Effective Date of the Consent Decree).

5. Part E: Leak Repairs

As of February 4, 2010, Quasi-Directed Maintenance is being performed during all repair attempts. There were no instances where a rescreen was not completed within the required timeframe. Seven leaking valve was replaced or repacked in the second half of 2014. Drill and tap repairs were not performed as there is a significant safety risk to perform drill and tap on valves in HAP service as the materials inside the piping is flammable and/or highly explosive.

6. Part F: Delay of Repair (DOR)

As of January 1, 2010 (prior to the Effective Date of the Consent Decree), the plant manager or his designee signs all DOR. As of March 5, 2010, the Covered Equipment on the DOR list continues to be monitored at their required frequency.

7. Part G: Equipment Replacement/Improvement Program (ERIP)

A list of all valves in the LDAR Program was submitted on March 5, 2010. Attachment #1 includes additional information on the ERIP, including each piece of equipment replaced or improved in the first half of 2014 and the schedule for future replacements or upgrades.

8. Part H: Management of Change (MOC)

MOC is being completed at the facility. All MOC documentation requires a review by the Environmental Department.

9. Part I: Training

Initial general training for all employees was completed in November 2011. Annual refresher training is scheduled for August 2014.

10. Part J: Quality Assurance/Quality Control (QA/QC)

On a daily basis, technicians are certifying that the data collected represents that monitoring performed by verifying the sensors. Two QA/QC audits were completed on November 25, 2014 and August 28, 2014. For the audit performed in the 3rd Quarter 2014, the only action was to include the points in the new acrylonitrile unloading station. This has been completed and was addressed in a non-compliance letter. The audit performed in 4th Quarter 2014 addresses a pump which was not repaired initially in 5 days. However the pump was turned off in order to stop the visual leak. The LDAR coordinator sent a refresher Email once alerted to this leaking pump. This communication is another refresher

INEOS ABS during the first half of 2013 was estimated to:

LDAR Technician/Maintenance	\$285,000
Equipment Replacements (Pumps/Valves)	\$ 38,500
LDAR External Audit	\$ 24,900

Total	\$348,400
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IV. NONCOMPLIANCE WITH CONSENT DECREE

Letter Dated 8/21/14 - This letter report is to inform you that a combination of 58 valves and open ended lines (OEL's) were not monitored under their quarterly frequency since the project went into service on March 12, 2014. The components were added due to a new acrylonitrile rail car unloading project. These components belong to process unit P001. The components were not monitored for first or second quarter 2014. The components were put into the LDAR program on August 18 and 19, 2014. All of the components were monitored on August 19, 2014. No leaks were identified during the monitoring. One valve and one OEL were classified as DTM and will be monitored prior to the end of the 2014 calendar year. One pump was also added to the program on August 19, 2014, but since it is a magnetic drive pump it is seal less and does not require monitoring, but has been included into the program anyway. A MOC was issued for this project; the environmental department was also aware of this change and its impact on the LDAR program but was ultimately overlooked when the project was implemented in March 2014.

Letter Dated 9/12/14 - This letter is to inform you that 43 difficult to monitor (dtm) valves were not monitored for the calendar year of 2013. This was discovered during the annual third party audit. This was due to a known glitch with the LeakDAS software that the site uses. LeakDAS automatically notifies what components are required to be monitored by a certain end date. Due to an issue with the database, these components were not listed to be monitored by the end of 2013. INEOS ABS did not realize that there were any unmonitored components. The monitoring technician never before monitored dtm components thus was not able to recognize components were not monitored. All have since been monitored with no leaks detected. INEOS ABS is currently working with LeakDAS and will upgrade to the newest version of LeakDAS when it comes available. INEOS ABS is going to manually confirm all dtm components are monitored in 2014.

Letter Dated 12/8/14 - In September 2014, INEOS reported difficult to monitor (dtm) valves which were not monitored in the calendar year of 2013. This was due to an issue of scheduling within LeakDAS. It has been discovered that there were 20 more dtm valves in DN3 which were unmonitored in 2013, they will be monitored by the end of December 2014. 9 of these dtm valves were monitored in September 2014. The valves were believed to be monitored in early 2014.

During a review in January 2015, it was noticed that one flanged connector was not improved (replaced gasket) as required in August 2013. This gasket is going to be replaced during the current maintenance shutdown in P042. Connector tracking will be looked at more closely so this does not reoccur.

INEOS ABS (USA) CORPORATION'S ADDYSTON, OH PLANT
CONSENT DECREE SEMIANNUAL REPORT

ATTACHMENT # 1

Equipment Replacement/Improvement Program

Consent Decree Civil Action No. 1:09-CV-545

Effective Date February 4, 2010

Reporting Period: 7/1/14 – 12/31/14

INEOS ABS - Addyston Plant
LDAR Leakers - 2014

Tag #	Process Unit	Component Description	Leak Detected	First Attempt Required By	First Attempt Completed	Maintenance Performed	Re-scanned Completed	Final Repair Required By	Final Repair Completed	Maintenance Performed	Comments/Reason for Delay of Repair
02516	DIN1	R2 FEED TREE - AN FLOW CONTROL VLV	08/04/14	08/09/14	08/04/14	Tightened Packing	08/04/14	08/19/14	08/04/14	NA	
08491	DIN1	SLURRY TANK PUMP AUTO INLET VLV AT TK BOTTOM	08/07/14	08/12/14	08/12/14	Tightened Packing	08/12/14	08/22/14	08/12/14	Valve Replaced - 11/12/14	
09084	DIN2	BOTTOM OF REFLUX RECEIVER BOMB-MAN DRAIN VLV ON OUTLET GOING TO ORGANIC TRAP	08/13/14	08/18/14	08/13/14	Replaced Valve	08/14/14	08/28/14	08/13/14	NA	
01803*	DIN2	MAN DRAIN VLV ON LINE FROM REFLUX PUMPS TO R1 FD TK	08/14/14	08/19/14	08/15/14	Tightened Packing	08/18/14	08/29/14	08/15/14	NA	
08452	DIN2	MEK IN CAT DIKE MAN BLK VLV	09/03/14	09/08/14	09/04/14	Tightened Bonnet	09/04/14	09/18/14	09/04/14	Valve Replaced - 9/4/14	
08449	DIN2	MAN DRAIN VLV ON MEK LINE IN CAT DIKE AREA-1ST LVL	09/16/14	09/23/14	09/19/14	Replaced Valve	09/19/14	10/03/14	09/19/14	NA	
03831*	DN1	RECYCLE TO TOP OF DV 1 - MANUAL VALVE	09/19/14	09/24/14	09/19/14	Tightened Packing	09/19/14	10/04/14	09/09/14	NA	
08203	DN1	REFLUX SUB COOLER DRAIN VALVE - UNDER DN1 REACTOR	12/03/14	12/08/14	12/04/14	Tightened Packing	12/04/14	12/18/14	12/04/14	To be replaced at next shutdown	
04344*	DN3	MEK FILTER MAN OUTLET VLV	12/08/14	12/13/14	12/11/14	Tightened Packing	12/30/14	12/23/14	12/11/14	DOR	Unit Down
03755	DN3	RECYCLE TO DN3 DOME-Y STRAINER BEFORE FM MAN DRAIN VLV	12/08/14	12/13/14	12/11/14	Replaced Valve	12/30/14	12/23/14	12/11/14	DOR	Unit Down
11169*	DN3	MEK FILTERS MAN VLV FOR PRESS GAUGE	12/08/14	12/13/14	12/11/14	Tightened Packing	12/30/14	12/23/14	12/11/14	DOR	Unit Down
02494*	DIN1	R2 FEED TREE - RECYCLE LINE - FLOW MTR MAN INLET VLV	12/09/14	12/14/14	12/12/14	Tightened Packing	12/12/14	12/24/14	12/12/14	NA	
10216*	DIN1	R2 FEED TREE (TOP OF STEPS GOLD TAGS)-MEK TO R2 FEED TREE	12/10/14	12/15/14	12/12/14	Tightened Packing	12/12/14	12/25/14	12/12/14	NA	
08971*	9EMUL	AN RAILCAR UNLOADING	12/12/14	12/17/14	12/16/14	Tightened Packing	12/16/14	12/27/14	12/16/14	NA	
04215*	DN1	AUTO BLOCK VLV FOR STY TO TINT MIX TANK	12/15/14	12/20/14	12/16/14	Tightened Packing	12/16/14	12/30/14	12/16/14	NA	
08235	9EMUL	CN/EMUL PUMP OUTLET GAUGE	12/20/14	12/25/14	12/23/14	Tightened Packing	12/23/14	01/04/15	12/23/14	Replaced - 1/12/15	
01408*	DIN1	AN TOTALZER BYPASS VLV	12/29/14	01/03/15	12/30/14	Replaced Valve	12/30/14	01/13/15	12/30/14	NA	

*- Previously Equipped with Certified Low Leaking Valves

INEOS ABS - Addyston Plant

LDAR ERIP Outstanding Improvement

Tag #	Process Unit	Component Description	Leak Detected	Replace/ Repack By Date
07099	DIN1	Refrigeration recycle tank	10/29/13	Next Maintenance Turn Around of the tank.
01400	DIN1	AN TOTALZER VLV BYPASS	10/06/14	Next maintenance turn around.
02298	DIN1	R1 FEED TREE - AN FLOW METER MANUAL OUTLET VALVE	12/18/14	Next maintenance turn around.
08444	DIN2	BACK PRESSURE CONTROL VALVE FOR R1 FEED TANK PUMPS	11/17/14	Next maintenance turn around.
02298	DIN2	N2 INTO TOP OF REFLUX RECEIVER BOMB	10/10/14	Next maintenance turn around.
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	09/02/14	Next time A13 is empty
08203	DN1	REFLUX SUB COOLER DRAIN VALVE - UNDER DN1 REACTOR	12/3/2014	Next maintenance turn around.
07721	DN1	REFLUX RECIEVER AUTO DRAIN VALVE	12/03/14	Next maintenance turn around.
03733	DN3	DV PLATFORM AREA - FLOW CONTROL VALVE OUTLET - MANUAL BLOCK VALVE	12/08/14	Next maintenance turn around.
03980	DN3	RECYCLE FILTERS MANUAL OUTLET DRAIN VALVE	12/07/14	Next maintenance turn around.
04339	DN3	MEK FILTER MANUAL INLET VALVE	12/08/14	Next maintenance turn around.
6125	DN3	MEK TO DN3 FLOW CONTROL VALVE	12/08/14	Next maintenance turn around.
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	10/02/14	Next maintenance turn around.
08949	9Emul	AN RAILCAR UNLOADING	12/12/14	Next maintenance turn around.
00805	9Emul	AN RAILCAR UNLOADING	12/12/14	Next maintenance turn around.

INEOS ABS - Addyston Plant

LDAR ERIIP Outstanding Improvement

1/28/2014

Tag #	Process Unit	Component Description	Leak Detected	Date Replaced or Repacked
08285	DN3	TOP OF MEK TANK-MAN BLK VLV IN METERING PUMPS RECIRC LINE	04/23/14	07/09/14
08290	DN3	TOP OF MEK TANK-TRUCK FILL LINE MAN VLV	04/23/14	07/09/14
07933^	DN3	E & W PUMPS-MAN OUTLET VLV TO FLOW METERS	08/05/14	11/12/14
03755	DN3	RECYCLE TO DN3 DOME-Y STRAINER BEFORE FM MAN DRAIN VLV	12/8/2014	12/11/2014
11087	DIN2	LINE TO BARO SUMP MAN DRAIN VLV- LEVEL BELOW JETS	03/12/14	07/09/14
02068	DIN2	Recycle FCV	10/27/13	07/02/14
01963	DIN2	Irganox in R2 feed tree	10/23/13	07/08/14
09084	DIN2	BOTTOM OF REFLUX RECEIVER BOMB- MAN DRAIN VLV ON OUTLET GOING TO ORGANIC TRAP	8/13/2014	8/14/2014
08452	DIN2	MEK IN CAT DIKE BLOCK VALVE	9/3/2014	9/3/2014
08449	DIN2	MAN DRAIN VLV ON MEK LINE IN CAT DIKE AREA-1ST LVL	9/18/2014	9/19/2014
01406	DIN1	AN TOTALZER BYPASS VLV	12/29/2014	12/30/2014
08235	9EMUL	CN/EMUL PUMP OUTLET GAUGE	12/20/2014	1/12/2015

^ - Valve has no packing. Plug was leaking. Plug has been replaced.

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Greater than 250 ppm Leak

Tag #	Process Unit	Component Description	Leak Detected	Date Replaced	Date Repacked	Shutdown Req'd?	Replace/ Repack By Date	Comments
08491	DIN1	Slurry Tank Pump Auto Inlet Valve AT TK	8/7/2014	11/12/2014		YES		Shutdown not technically needed but makes far the most sense in terms of logic, Env and safety
09084	DIN2	BOTTOM OF REFLUX RECEIVER BOMB-MAN DRAIN VLV ON OUTLET GOING TO ORGANIC TRAP	8/13/2014	8/14/2014		NO		Visual Leaker
08452	DIN2	MEK IN CAT DIKE BLOCK VALVE	9/3/2014	9/4/2014		NO		
08449	DIN2	MAN DRAIN VLV ON MEK LINE IN CAT DIKE AREA-1ST LVL	9/18/2014	9/19/2014		NO		
08203	DN1	REFLUX SUB COOLER DRAIN VALVE - UNDER DN1 REACTOR	12/3/2014			YES		
03755	DN3	RECYCLE TO DN3 DOME-Y STRAINER BEFORE FM MAN DRAIN VLV	12/8/2014	12/11/2014		NO		
08235	9EMUL	CN/EMUL PUMP OUTLET GAUGE	12/20/2014	1/12/2015		NO		
01406	DIN1	AN TOTALZER BYPASS VLV	12/29/2014	12/30/2014		NO		

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
October 1, 2014 - December 31, 2014

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
07721	DN1	REFLUX RECIEVER AUTO DRAIN VALVE	12/03/14	141		
03733	DN3	DV PLATFORM AREA - FLOW CONTROL VALVE OUTLET - MANUAL BLOCK VALVE	12/08/14	147		
03980	DN3	RECYCLE FILTERS MANUAL OUTLET DRAIN VALVE	12/07/14	136		
04339	DN3	MEK FILTER MANUAL INLET VALVE	12/08/14	247		
6125	DN3	MEK TO DN3 FLOW CONTROL VALVE	12/08/14	104		
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	10/02/14	106		
08949	9Emul	AN RAILCAR UNLOADING	12/12/14	123		
00805	9Emul	AN RAILCAR UNLOADING	12/12/14	102		
01400	DIN1	AN TOTALZER VLV BYPASS	10/06/14	123	Have already been replaced with Low Leaking Technology	
02298	DIN1	R1 FEED TREE - AN FLOW METER MANUAL OUTLET VALVE	12/18/14	145		
08444	DIN2	BACK PRESSURE CONTROL VALVE FOR R1 FEED TANK PUMPS	11/17/14	166		
02298	DIN2	N2 INTO TOP OF REFLUX RECEIVER BOMB	10/10/14	102		

INEOS ABS - Addyston Plant
R Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
July 1, 2014 - September 30, 2014

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
07933	DN3	E & W PUMPS-MAN OUTLET VLV TO FLOW METERS	08/05/14	187	11/12/14	Valve has no packing. Plug was leaking. Plug has been replaced.
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	09/02/14	192		The tank will need to be emptied and degassed.
01400*	DIN1	AN TOTALZER VLV BYPASS	08/27/14	140		
01401*	DIN1	AN TOTALZER INLET VLV FOR DIN1	09/02/14	151		

* - Previously Equipped with Certified Low Leaking Technology

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INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
April 1, 2014 - June 30, 2014

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
08290	DN3	TOP OF MEK TANK-TRUCK FILL LINE MAN VLV	04/23/14	155	07/09/14	
08285	DN3	TOP OF MEK TANK-MAN BLK VLV IN METERING PUMPS RECIRC LINE	04/23/14	110	07/09/14	

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
Jan 1, 2014 - March 31, 2014

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
11087	DIN2	LINE TO BARO SUMP MAN DRAIN VLV- LEVEL BELOW JETS	03/12/14	156	07/09/14	
02096*	DIN2	AN TO PROCESS- 2ND FLR-WEST OF CONTACTOR	03/09/14	152		

* - Previously Equiped with Certified Low Leaking Technology

INEOS ABS - Addyston Plant
LDAR Leaker Replacements/Repackings -
Between 100 ppm and 250 ppm Leak
October 1, 2013 - December 31, 2013

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
07099	DIN1	Refrigeration recycle tank	10/29/13	142		
01400*	DIN1	AN filter system	10/04/13	130		
02068	DIN2	Recycle FCV	10/27/13	211	07/02/14	
01963	DIN2	Irganox in R2 feed tree	10/23/13	120	07/08/14	
00524	DN1	DN3 purge into spent monomer tank	11/22/13	184	11/22/13	
03816	DN1	Recycle to top of DV1 FM man outlet valve	11/27/13	104	03/28/14	

* - Previously Equiped with Certified Low Leaking Technology

INEOS ABS - Addyston Plant
LDAR Leaker Improvement/Replacement -
Connectors > 250 ppm

Other connectors have been improved as a first or final attempt on repair to correct a leak.

Tag #	Process Unit	Component Description	First Leak Detected	Second Leak Detected	Date Improved	Comments
02458B	DIN1	Connector- North stripper pump manual inlet block valve	12/27/12	08/17/13		Currently being replaced.